

FUEL SUPPLY APPARATUS FOR FUEL CELL

Examiner: Z. Best S.N. 10/510,103 Art Unit: 1795 February 12, 2009

DETAILED ACTION

1. Applicant's amendment filed on February 9, 2009 was received. Claims 3-10, 20, and 22 were amended. Claims 2, 11-19, 21, and 23 were cancelled.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 112

3. The rejection under 35 U.S.C. 112, first paragraph of Claim 22 as failing to comply with the written description requirement is withdrawn because Claim 22 was amended.

Allowable Subject Matter

4. Claims 3-10, 20, and 22 are allowed. The following is an examiner's statement of reasons for allowance:

Claim 3 is allowed because the prior art of record, Saito et al. and Sahoda et al., does not disclose or suggest the valve body comprises a hydrogen recirculation flow passage communicating with the hydrogen recirculation port, wherein the valve body has a cylindrical shape and received in the housing for a sliding and moving capability along an

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axis of the valve body, and wherein the plural ejector sections are disposed in the valve body in communication with the hydrogen recirculation flow passage along a direction in which the valve body slides such that sliding movement of the valve body effectuated in the housing allows either one of the plural ejector sections to be brought into communication with the hydrogen inlet port and the hydrogen outlet port of the housing as recited in Claim 3.

Claim 4 is allowed because the prior art of record, Saito et al. and Sahoda et al., does not disclose or suggest the valve body comprises a hydrogen recirculation flow passage communicating with the hydrogen recirculation port, wherein the valve body has a cylindrical shape and received in the housing for a rotationally moving capability about an axis of the valve body, and wherein the plural ejector sections are disposed in the valve body in communication with the hydrogen recirculation flow passage along a direction in which the valve body rotationally moves such that rotational movement of the valve body effectuated in the housing allows either one of the plural ejector sections to be brought into communication with the hydrogen inlet port and the hydrogen outlet port of the housing as recited in Claim 4.

Claim 5 is allowed because the prior art of record, Saito et al. and Sahoda et al., does not disclose or suggest the valve body comprises a hydrogen recirculation flow passage communicating with the hydrogen recirculation port, wherein the valve body has a spherical shape and received in the housing for a rotationally moving capability about a central axis of the valve body, and wherein the plural ejector sections are disposed in the valve body in

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communication with the hydrogen recirculation flow passage along a direction in which the valve body rotationally moves such that rotational movement of the valve body effectuated in the housing allows either one of the plural ejector sections to be brought into communication with the hydrogen inlet port and the hydrogen outlet port of the housing as recited in Claim 5.

Claim 6 is allowed because the prior art of record, Saito et al. and Sahoda et al., does not disclose or suggest the valve body comprises a hydrogen recirculation flow passage communicating with the hydrogen recirculation port, wherein the valve body has a cylindrical shape and received in the housing to rotationally move about an axis of the valve body while sliding along the axis thereof, and wherein the plural ejector sections are disposed in the valve body on a spiral configuration in communication with the hydrogen recirculation flow passage along a direction in which the valve body rotationally moves while in sliding movement such that rotational movement of the valve body while in sliding movement effectuated in the housing allows either one of the plural ejector sections to be brought into communication with the hydrogen inlet port and the hydrogen outlet port of the housing as recited in Claim 6.

Claims 7-10, 20, and 22 are allowed because the prior art of record, Saito et al. and Sahoda et al., does not disclose or suggest the valve body moveably received in the housing and incorporating a plurality of ejector sections and further comprising a shut-off portion to shut off the hydrogen inlet and the hydrogen outlet port during movement thereof as recited in independent Claims 8, 20, and 22.

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Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zachary Best whose telephone number is (571) 270-3963. The examiner can normally be reached on Monday to Thursday, 7:30 - 5:00 (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dah-Wei Yuan can be reached on (571) 272-1295. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/Dah-Wei D. Yuan/
Supervisory Patent Examiner, Art Unit 1795